

REMARKS/ARGUMENTS

Telephone Interview

Applicants thank the Examiner for the very productive telephone interview of July 23, 2008. Applicants appreciate the opportunity to discuss Fibre Channel concepts and also for the Examiner providing detailed element correspondence for exemplary claim 28. Applicants further thank the Examiner for indicating that the Stai reference does not teach claims 28 and 61.

Section 102 Rejections

Claims 1, 9, 17, 28, 39, 61, 71, 81, 91 and 101

One common element in these claims is either a switching device, switch or method of operating a switch, with the switching device or switch having fabric or F_ports, a node or N_port and a switch or switch circuit interconnecting the ports. That portion of each claim has been rejected over Stai, basically Figure 1. As clarified and using claim 28 as exemplary, the nodes are corresponded to devices 106A and 106B. The first fabric is corresponded to everything to the right of the fabric 102, namely loop 108 and NL_Ports 110A – E. The Fibre Channel switch is equated to the fabric 102. The plurality of F_ports are equated to ports 104A, 104B and 105. The N_port is considered to be phantom devices 112A and 112B.

Applicants disagree with corresponding loop 108 to the required first fabric. A loop does not meet the common definition of a fabric. For example, the FC-PH standard, one of the fundamental Fibre Channel specifications, defines fabric as “the entity which interconnects N_ports attached to it and is capable of routing frames by using only the D-ID information in a FC-2 frame header.” Applicants submit that a loop does not qualify as routing does not occur on a loop. Frames are just passed sequentially around the loop without any routing of frames.

Even if the loop is treated as a fabric for purposes of argument, the required N_port¹ is not present in Stai. Phantom devices 112A and 112B are not N_ports. They can be viewed as

¹ Applicants note the argument made referencing col. 3, lines 62-66 of Stai, which discuss F_ports and N_ports as labels. From the Office Action, it appears that the description in Stai is being taken out of context or interpreted as “N_port is a mere label,” without considering the remainder of the sentence, such as “used to identify a device...which is coupled to the fabric using point-to-point topology.” This remainder indicates that N_port is not a mere label but indicates and inherently includes the functioning of ports at the given locations, which the Fibre Channel standards describe in great detail. Therefore the terms node port or N_port are not just mere labels, but imply certain inherent functionality and so cannot simply be applied to any port.

part of the FL_port 105, which performs the necessary address translations or they can be viewed as non-existent as they are not physical entities but rather phantom or virtual devices developed due to the address translations of the FL_port 105. In neither case are the phantom devices properly equated to the required N_port. Therefore a required element is missing when the items taught by Stai are properly considered and categorized.

Claims 17, 28, 39, and 50

The above arguments use claim 28 as exemplary and therefore correspond directly to claim 28 and very closely for claims 17, 39 and 50. Applicants respectfully submit that the rejections are improper and request withdrawal.

Claims 1, 9 and 101

Applicants submit that the above arguments apply equally to claims 1, 9 and 101. Further, Applicants submit that the preamble should be accorded patentable weight in this instance.

In this case, the preamble does not just recite a purpose or intended use. The preamble defines the environment in which the claimed switching device will operate, namely with a series of nodes and a first fabric. Indeed, these two items are recited in the body of the claim. Ignoring the preamble terms then would ignore these items and the required operation of the body elements with the preamble items would be left undefined. Proper interpretation of the body elements requires giving meaning to series of nodes and first fabric. As these terms are in the preamble, they must be given patentable weight. Therefore, the arguments made above with regard to claim 28 apply completely when the preamble is properly construed so that claims 1, 9 and 101 are allowable.

Claims 61, 71, 81, and 91

The arguments made with regard to claim 28 apply equally so that claims 61, 71, 81, and 91 are patentable. Further, claims 61, 71, 81, and 91 all require a second fabric. A detailed correspondence of the claim 28 elements has been provided above. Those elements, even when considered according to the improper nature clarified in the interview, define all of the items present in Figure 1 of Stai, leaving nothing to correspond to the second fabric. The Final Office

Action argues that other citations have been provided. Reviewing the rejections of claims 61, 71, 81 and 91 produces only col. 3, lines 54-62 beyond references to Figure 1. These lines are actually describing Figure 1 and broadly discuss switches being fabric elements and that the ports 104A, 104B and 105 are associated with “plurality of switches.” Thus the citations do not extend beyond Figure 1 and clearly do not teach or suggest the required second fabric. As a result of both lines of arguments, claims 61, 71, 81, and 91 are allowable.

Claims 2, 10, 18, 29, 40, 51, 62, 72, 82, 92 and 102

Claims 2, 10, 18, 29, 40, 51, 62, 72, 82, 92 and 102 all require the node or N_port to operate as a virtual node or N_port, with one virtual node or N_port address per fabric or F_port. The Final Office Action has merely cited to portions of Stai which define N_ports and F_ports and provided commentary that is interpreted as indicating N_port is a mere label with no functionality significant. Applicants have addressed this point above. There is no teaching of a virtual node or N_port and no teaching of providing one virtual node or N_port address per fabric or F_port. Stai does teach providing new public addresses, but those are at an F_port and are based on connected devices, not number of F_ports. The rejections are improper and must be withdrawn.

Claims 5-8, 13-16, 21-24, 32-35, 43-46, 54-57, 65-67, 75-77, 85-87, 95-97 and 103-106

Applicants submit that the rejections of these claims are improper. The arguments made above for the independent claims apply equally as the claims and require node or N-ports as discussed above and not present in Stai. The rejections are improper and should be withdrawn.

Claims 107-117

Applicants submit these rejections are improper. As to claims 107-112 and 117, the cited fabric 102 has previously been cited as the switching device, so it cannot be reused as the required fabric of those claims. Further, the arguments of claims 61, 71, 81, and 91 apply, further indicating no teaching of the required second fabric. The citation to col. 3, lines 56-57 just defines the term fabric. The lines do not teach or suggest the required second fabric. As to claims 113-116, a third fabric is required. As the arguments to claims 61, 71, 81, and 91 show,

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Stai does not teach the required second fabric, much less a third fabric. Withdrawal of the rejections is requested.

CONCLUSION

Based on the above remarks Applicants respectfully submit that all of the present claims are allowable. Reconsideration is respectfully requested.

Respectfully submitted,

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/Keith Lutsch/

Keith Lutsch, Reg. No. 31,851

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Wong, Cabello, Lutsch,
Rutherford & Bruculeri, L.L.P.
20333 SH 249, Suite 600
Houston, TX 77070
832-446-2405